

REMARKS

Objection to the Drawings

The drawings have been objected to under 37 CFR 1.83(a) because the limitation "the conductors having a pattern containing digital data representing locations of the good components, the defective component and the component contacts" is stated to not be shown.

By this Amendment the claims have been amended to remove the above limitation, which has been replaced by the recitation in claim 52 of "the conductors having a pattern containing information from testing of the semiconductor components representing locations of the good components, the defective component and the component contacts." Independent claims 56, 60 and 70 have been amended to include similar recitations. The conductors 22 are shown in Figure 2F. In addition, verbatim antecedent basis for the "information" characteristics of the conductors is provided on page 13, lines 27-29 of the specification. Verbatim antecedent basis for the "pattern" characteristic of the conductors is provided on page 5, line 6; page 10, line 20; page 11, line 1; page 12, lines 3 and 30; page 13, line 23; and page 14, line 11 of the specification.

With regard to the Examiner's interpretation of 37 CFR 1.83(a), it is submitted to be incorrect. Although the drawings must show every feature of the invention specified in the claims, all the characteristics of the feature do not need to be shown in the drawings. For example, if the Applicant were to claim the conductors as having a "high conductivity", this characteristic would not need to be shown in the drawings. Similarly, the presently claimed characteristic of the conductors "having a pattern

containing information" need not be shown in the drawings, because it is explained in the specification.

In this regard, under MPEP 608.02, drawings are required "where necessary for the understanding of the subject matter to be patented". In the present case, the drawings show details of the conductors and their method of fabrication. In addition, the specification goes into even greater detail on the conductors and their method of fabrication. In view of the originally filed drawings and specification, it is submitted that one skilled in the art would understand the claimed subject matter.

Objection to the Specification

The specification has been objected to because the limitation "the conductors having a pattern containing digital data representing locations of the good components, the defective component and the component contacts" is stated to be new matter added by the Amendment filed August 8, 2005.

As argued above, this limitation has been removed from the amended claims, and replaced by the recitation "the conductors having a pattern containing information from testing of the semiconductor components representing locations of the good components, the defective component and the component contacts." Verbatim antecedent basis for the new recitation was previously identified. In addition, further antecedent basis for this recitation is provided by the description of the method for fabricating the conductors, which is shown in Figures 1 and 2A-2J, and described on page 7, line 2 to page 15, line 30 of the specification.

Rejections Under 35 USC §112, first paragraph

Claims 52, 56, 60 and 70 have been rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement.

(A) In claims 52, 56, 60 and 70 it is stated that the specification fails to describe the phrase "the conductors having a pattern containing digital data representing locations of the good components, the defective component and the component contacts".

As argued above, this limitation has been removed from the amended claims, and replaced by the recitation "the conductors having a pattern containing information from testing of the semiconductor components representing locations of the good components, the defective component and the component contacts." Verbatim antecedent basis for the new recitation was previously identified. In addition, further antecedent basis for this recitation is provided by the description of the method for fabricating the conductors, which is shown in Figures 1 and 2A-2J, and described on page 7, line 2 to page 15, line 30 of the specification.

Rejections Under 35 USC §112, second paragraph

Claims 52, 56, 60 and 70 have been rejected under 35 USC §112, second paragraph, as being indefinite. The limitations identified as being indefinite have all been removed from the amended claims as follows.

(a) "a plurality of conductors.... in electrical communication with the component contacts configured to redistribute the component contacts on the good components". This limitation has been removed from the amended claims.

(b) "and to repair the defective component by connecting selected component contacts on the defective component with selected integrated circuits on the

defective component". This limitation has been removed from the amended claims.

(c) "the conductors having a pattern containing digital data representing locations of the good components, the defective component and the component contacts". This limitations has been removed from the amended claims.

Rejections Under 35 USC §102(b)

Claims 52-62 and 70-77 have been rejected under 35 USC §102(b) as being anticipated by Tanizawa et al. (US Patent No. 4,721,995).

The rejections under 35 USC §102(b) are traversed because this reference does not disclose or enable all of the features of the claimed semiconductor component. Specifically, Tanizawa et al. does not disclose or enable "redistribution conductors having a pattern containing information from testing of the semiconductor components".

Rather, in Tanizawa et al. circuit patterns 6 (Figure 3, first described at column 5, line 31) are contained on an insulative film 5 (Figure 6, first described at column 5, line 29). However, per the description at column 5, lines 56-65 the circuit patterns 6 are completed first, and then the ICs are tested. The circuit patterns 6 (also described as circuit blocks) are then used to connect repair chips 8 (Figure 6B, first described at column 5, lines 62-66). The circuit patterns 6 do not have a pattern containing information from testing of the ICs as presently claimed, but rather have a universal pattern that allows any circuit block 2 (Figure 4) identified as being defective to be replaced by a repair chip 8 (Figure 6b).

Further, the Examiner has characterized the previous recitation of the "conductors having a pattern containing digital data" as being "functional or intended use language

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that does not differentiate the claimed structure over Tanizawa". Assuming that the Examiner will apply the same interpretation to the new recitation, Applicant would respond as follows. The Examiner's interpretation of this claim language is incorrect. As held in In re Evanega, 829 F.2d 1110, 4 USPQ2d 1249 (Fed. Cir. 1987), In re Miller, 418 F.2d 1392, 64 USPQ 46 (CCPA 1969) and In re Gulack, 703 F.2d 1381, 217 USPQ 401 (Fed Cir. 1983), claims are to be evaluated as a whole and all limitations including functional limitations are to be considered.

However, the subject recitation and the new recitation as well, are neither functional nor intended use language. Functional language means a structure is stated to perform a certain function, which is not the case here. Intended use language means a structure can be used for a certain purpose, which is also not the case here. Rather, the presently claimed conductors, are stated to have the physical characteristic of a pattern containing information from testing of the components. This physical characteristic allows the conductors to perform the stated functions of repair, electrical isolation, or connection of components in clusters.

In support of the rejections, the Examiner also states "Since the term "digital data" is defined as the locations (i.e., the good components, the defective component and the component contacts) and the patterned conductor of Tanizawa also represents the locations (i.e., the good components, the defective component and the component contacts), the patterned conductor of Tanizawa contains the digital data. Thus Tanizawa meets the claim."

This interpretation of the claims and the reference is submitted to be incorrect. In the present component, the

conductors not only locate the good components and the defective component, but they also repair the defective component, electrically isolate the defective component, and connect good components in clusters. In Tanizawa et al., the defective component is not repaired, but is replaced by a repair chip 8 (Figure 6b). Further, Applicant is unable to locate any disclosure in Tanizawa that the circuit pattern 6 electrically isolates a defective component, or connects components in clusters.

In regard to the configuration of the presently claimed conductors, claim 60 recites "the conductors configured to reconfigure the component contacts on the defective component." Applicant is unable to locate this feature in Tanizawa et al.

Claim 70 recites "the conductors configured to either repair, reconfigure, or electrically isolate the defective component, or to electrically connect multiple good components in a cluster that excludes the defective component." Applicant is unable to locate this feature in Tanizawa et al.

In addition, claims 52 and 56 have been amended to include additional recitations, which more clearly define the configuration of the conductors. In particular, claim 52 states that the pattern of the conductors is "for repairing the defective component." Claim 56 states that the pattern of the conductors is "for electrically isolating the defective component".

In view of the above noted features of the presently claimed component which are not disclosed or enabled by Tanizawa et al., the present claims are submitted to be novel over this reference. In view of the lack of disclosure or suggestion of the above noted features in

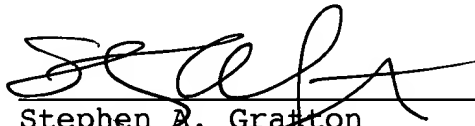
Tanizawa et al., the present claims are also submitted to be unobvious over this reference.

Conclusion

In view of the above arguments, favorable consideration and allowance of claims 52-62 and 70-77 is requested. The specification has also been amended to update the "Cross Reference To Related Applications". Also being filed with this Amendment is an Information Disclosure Statement. Should any issues remain, the Examiner is requested to contact the undersigned by telephone.

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